

METHODS AND DEVICE FOR PERCUTANEOUS REMOTE ENDARTERECTOMY

ABSTRACT OF THE DISCLOSURE

The present invention provides devices, systems, methods and kits for the percutaneous removal of unwanted tissue or obstructive matter from body cavities or lumens, particularly from the vasculature. Blood vessels, including the coronary, peripheral and neurovascular circulation, which are narrowed or blocked by atheromatous material or plaque are often treated with traditional endarterectomy procedures. The present invention allows the benefits of such a procedure with an intraluminal approach, particularly a percutaneous approach. Generally, the present invention provides a set of catheters or tools which are percutaneously introduceable to the site of the blockage or occlusion. The tools dissect or cut through the innermost tissue layer of the lumen to an underlying tissue layer. The innermost tissue layer is then stripped away from the underlying layer with the occlusive material thereattached. The detached tissue layer and occlusive material is then removed from the lumen; this may include additional cutting, maceration and removal through mechanical aspiration. In any case, the resulting lumen is free of obstruction.

PA 3133769 v1